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EXAMINER

CHEN, QING

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,518	Applicant(s) DYE ET AL.	
	Examiner Qing Chen	Art Unit 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the RCE filed on December 21, 2007.
2. **Claims 1-58** are pending.
3. **Claims 1, 22, 23, 40-42, 47, 52, and 53** have been amended.
4. The objection to the oath/declaration is withdrawn in view of Applicant's submission of the supplemental oath/declaration.
5. The objections to Claims 22, 23, 41, and 47 are withdrawn in view of Applicant's amendments to the claims.
6. The 35 U.S.C. § 112, second paragraph, rejections of Claims 41, 42, and 53 are withdrawn in view of Applicant's amendments to the claims.

Response to Amendment

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. **Claims 51-58** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 51 recites the limitation "[a] memory medium comprising program instructions." The claim is rendered indefinite because program instructions can only be stored or recorded on

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a memory medium. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “[a] memory medium storing program instructions” for the purpose of further examination.

Claims 52-58 depend on Claim 51 and, therefore, suffer the same deficiency as Claim 51.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-58** are rejected under 35 U.S.C. 103(a) as being unpatentable over **US 5,801,689 (hereinafter “Huntsman”)** in view of **US 4,901,221 (hereinafter “Kodosky”)**.

As per **Claim 1**, Huntsman discloses:

- receiving user input to the second computer, wherein said user input specifies the graphical program on the first computer (*see Column 9: 14-28, “A standard WWW “Web” browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the “starter URL” as specified by*

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the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer.”);

- *executing the graphical program on the first computer (see Column 8: 20-23, “The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19.”);*

- *providing information describing the user interface of the graphical program to the second computer during said executing (see Column 9: 31-41, “In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM.”); and*

- *displaying the user interface of the graphical program on the second computer after said providing (see Column 9: 42-50, “The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML “clickable” image.”);*

- *wherein the user interface facilitates interaction between a user of the second computer and the graphical program executing on the first computer (see Column 9: 42-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”).*

However, Huntsman does not disclose:

- *wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function.*

Kodosky discloses:

- wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function (*see Column 8: 8-23, "The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 2**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein said providing information comprises the first computer providing information describing the user interface of the graphical program to the second computer during said executing (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*).

As per **Claim 3**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- the first computer providing information describing the user interface of the graphical program to a plurality of computers during said executing (*see Column 8: 11-15, "One or more second computers 25 running a standard, off-the-shelf hypertext browser program 27, can effectuate remote control using the standard, widely installed networking protocols, including those used in the internet [9]."*); and

- each of the plurality of computers displaying the user interface of the graphical program after said providing (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image."*).

As per **Claim 4**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein the graphical program executes to perform a measurement or automation function (*see Column 1: 29-34, "GUI environments tend to use a pointing device, like a mouse, in addition to a keyboard. Instead of typing a textual command, the user of a graphical interface typically selects a button or menu selection with a pointing device such as a mouse and "clicks" on his selection."*).

As per **Claim 5**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein the first computer and the second computer are connected over a network (*see Column 9: 12-14, "The second computer 25 is connected to the first computer over the internet 31 ..."*); and
- wherein said providing comprises the first computer providing the information describing the user interface of the graphical program over the network to the second computer (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*).

As per **Claim 6**, the rejection of **Claim 5** is incorporated; and Huntsman further discloses:

- the second computer connecting to the first computer over the network after said receiving user input to the second computer (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*);
- wherein said providing information is performed after said user input specifying the graphical program on the first computer and after said connecting (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*).

As per **Claim 7**, the rejection of **Claim 6** is incorporated; and Huntsman further discloses:

- wherein the graphical program is already executing on the first computer when said connecting occurs (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*).

As per **Claim 8**, the rejection of **Claim 6** is incorporated; and Huntsman further discloses:

- the first computer launching execution of the graphical program in response to said connecting to the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*).

As per **Claim 9**, the rejection of **Claim 6** is incorporated; and Huntsman further discloses:

- wherein said receiving user input specifying the graphical program on the first computer comprises receiving a uniform resource locator (URL) (*see Column 9: 31-33, "The server control program 21 on the first computer 19 recognizes the URL from the second computer and accepts the connection as defined by HTTP and WWW protocol [9]."*).

As per **Claim 10**, the rejection of **Claim 9** is incorporated; and Huntsman further discloses:

- wherein the URL specifies one of: the first computer or the graphical program on the first computer (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*).

As per **Claim 11**, the rejection of **Claim 5** is incorporated; and Huntsman further discloses:

- wherein the network is the Internet (*see Column 9: 12-14, "The second computer 25 is connected to the first computer over the internet 31 ..."*).

As per **Claim 12**, the rejection of **Claim 5** is incorporated; and Huntsman further discloses:

- wherein said displaying comprises displaying the user interface of the graphical program on a web browser of the second computer (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image."*).

As per **Claim 13**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- receiving user input to the graphical program via the displayed user interface on the second computer (*see Column 9: 42-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*); and
- providing the user input to the first computer (*see Column 9: 50-57, "The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click."*);
- wherein the graphical program executing on the first computer is operable to respond to the user input (*see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7."*).

As per **Claim 14**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein the graphical program produces a first output state (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*); and

- wherein said displaying the user interface includes displaying the user interface illustrating the first output state (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image."*).

As per **Claim 15**, the rejection of **Claim 14** is incorporated; and Huntsman further discloses:

- providing a user interface update indicating the second output state (*see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7."*); and

- updating the user interface displayed on the second computer in response to the user interface update (*see Column 10: 6-10, "Moments later, a user at the second computer 25 will typically select the "REFRESH" hypertext link which sends a reference of REMOTE.HTM of FIG. 10 to the first computer, repeating the behavior just described."*).

As per **Claim 16**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- displaying the graphical diagram on the second computer, using the information regarding the graphical diagram (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image."*).

However, Huntsman does not disclose:

- providing information regarding a block diagram of the graphical program.

Kodosky discloses:

- providing information regarding a block diagram of the graphical program (*see Column 8: 8-23, "The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to

include providing information regarding a block diagram of the graphical program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 17**, the rejection of **Claim 16** is incorporated; and Huntsman further discloses:

- providing the user input specifying the edit to the first computer (*see Column 9: 50-57, "The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click."*);
- wherein the first computer is operable to edit the graphical program according to the user input specifying the edit (*see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7."*).

However, Huntsman does not disclose:

- receiving user input specifying an edit to the block diagram.

Kodosky discloses:

- receiving user input specifying an edit to the block diagram (*see Column 18: 47-51, "FIG. 25 shows the EDIT menu selections ... CLEAR is useful for removing items from the active window, e.g., selected wires and structures from the block diagram window, or controls from the front panel window."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include receiving user input specifying an edit to the block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 18**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein said specifying the graphical program comprises providing a uniform resource locator (URL) (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*).

As per **Claim 19**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- displaying information indicating a plurality of graphical programs on the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*);

- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the plurality of graphical programs (*see Column 9: 47-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*).

As per **Claim 20**, the rejection of **Claim 19** is incorporated; and Huntsman further discloses:

- wherein said displaying information indicating a plurality of graphical programs on the first computer comprises displaying a list of the plurality of graphical programs on the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*); and

- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the list of the plurality of graphical programs (*see Column 9: 47-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*).

As per **Claim 21**, the rejection of **Claim 1** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program includes a block diagram portion and a user interface portion; and
- wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer.

Kodosky discloses:

- wherein the graphical program includes a block diagram portion and a user interface portion (*see Figure 3: 40*); and
- wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer (*see Column 17: 63-68, "With the front panel and block diagram complete, the instrument is ready to be used. The instrument is operated from the front panel. To execute the instrument, the user simply configures the input controls and "clicks" the GO button on the top of the screen ..."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program includes a block diagram portion and a user interface portion; and wherein said executing the graphical program on the first computer comprises executing the block diagram portion of the graphical program on the first computer. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 22**, the rejection of **Claim 21** is incorporated; however, Huntsman does not disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion.

Kodosky discloses:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion (*see Column 8: 13-19, "The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 23**, the rejection of **Claim 22** is incorporated; and Huntsman further discloses:

- the user manipulating inputs of at least one input variable on the second computer
(see Column 9: 42-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.");

- providing inputs of at least one input variable to the first computer *(see Column 9: 50-57, "The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click.");*

- providing the output of at least one output variable to the second computer *(see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.");*
and

- displaying the output of at least one output variable on the second computer *(see Column 10: 6-10, "Moments later, a user at the second computer 25 will typically select the "REFRESH" hypertext link which sends a reference of REMOTE.HTM of FIG. 10 to the first computer, repeating the behavior just described.");*

However, Huntsman does not disclose:

- the block diagram portion executing using the inputs of at least one input variable on the second computer; and
- the block diagram portion generating an output of at least one output variable.

Kodosky discloses:

- the block diagram portion executing using the inputs of at least one input variable on the second computer (*see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure."*); and
- the block diagram portion generating an output of at least one output variable (*see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include the block diagram portion executing using the inputs of at least one input variable on the second computer; and the block diagram portion generating an output of at least one output variable. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 24**, the rejection of **Claim 1** is incorporated; however, Huntsman does not disclose:

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- wherein the graphical program comprises a graphical data flow program.

Kodosky discloses:

- wherein the graphical program comprises a graphical data flow program (*see Column 9: 33-36, "The structures represented in FIGS. 8-12 substantially facilitate the application of data flow programming techniques which are used in the preferred embodiments of the present invention."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a graphical data flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 25**, the rejection of **Claim 1** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program comprises a graphical control flow program.

Kodosky discloses:

- wherein the graphical program comprises a graphical control flow program (*see Column 9: 36-42, "FIG. 8 illustrates a sequence structure. FIG. 9 illustrates an iterative loop structure. FIG. 10 illustrates a conditional structure ..."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a graphical control flow program. The

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modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 26**, the rejection of **Claim 1** is incorporated; and Huntsman further discloses:

- wherein the graphical program comprises a graphical execution flow program (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*).

As per **Claim 27**, the rejection of **Claim 1** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program implements a virtual instrument; and
- wherein the user interface of the graphical program comprises a front panel of a virtual instrument.

Kodosky discloses:

- wherein the graphical program implements a virtual instrument (*see Figure 3: 40*);

and

- wherein the user interface of the graphical program comprises a front panel of a virtual instrument (*see Figure 3: 42*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to

include wherein the graphical program implements a virtual instrument; and wherein the user interface of the graphical program comprises a front panel of a virtual instrument. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 28**, Huntsman discloses:

- a first computer including a processor coupled to a memory, wherein the first computer is operable to couple to a network (*see Figure 4: 19 and 31*);
 - a graphical program stored in the memory of the first computer (*see Figure 4: 23*);
- and
- a second computer operable to couple to the network, wherein the second computer includes a display (*see Figure 4: 25*);
 - wherein the second computer is operable to receive user input specifying the graphical program on the first computer (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*);
 - wherein the first computer is operable to execute the graphical program and is operable to provide information describing a user interface of the graphical program over the network to the second computer during said executing (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is*

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generally whatever program is in the foreground of the first computer 19.”; Column 9: 31-41, “In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM.”);

- wherein the second computer is operable to receive the information describing the user interface and display the user interface of the graphical program in response to said providing (*see Column 9: 42-50, “The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML “clickable” image.”); and*

- wherein the user interface facilitates interaction between a user of the second computer and the graphical program executing on the first computer (*see Column 9: 42-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”).*

However, Huntsman does not disclose:

- wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function.

Kodosky discloses:

- wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function (*see Column 8: 8-23, “The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual*

representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42.”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 29**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to connect to the first computer over the network using the user input that specifies the graphical program on the first computer (*see Column 9: 14-28, “A standard WWW “Web” browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the “starter URL” as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer.”).*

As per **Claim 30**, the rejection of **Claim 29** is incorporated; and Huntsman further discloses:

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- wherein the first computer is operable to launch execution of the graphical program in response to the second computer connecting to the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*).

As per **Claim 31**, the rejection of **Claim 29** is incorporated; and Huntsman further discloses:

- wherein said user input comprises a uniform resource locator (URL) (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*).

As per **Claim 32**, the rejection of **Claim 31** is incorporated; and Huntsman further discloses:

- wherein the URL specifies one or more of: the first computer or the graphical program on the first computer (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5. URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer."*).

As per **Claim 33**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the network is the Internet (*see Column 9: 12-14, "The second computer 25 is connected to the first computer over the internet 31 ..."*).

As per **Claim 34**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the second computer stores a web browser, wherein the web browser is executable on the second computer to display the user interface of the graphical program on the second computer (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image."*).

As per **Claim 35**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to receive user input to the graphical program via the displayed user interface on the second computer (*see Column 9: 42-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*);

- wherein the second computer is operable to provide the user input to the first computer (*see Column 9: 50-57, "The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click."*); and

- wherein the graphical program executing on the first computer is operable to respond to the user input (*see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7."*).

As per **Claim 36**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the graphical program is executable to produce a first output state (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*); and

- wherein the second computer is operable to display the first output state in the user interface (see Column 9: 42-50, “The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML “clickable” image.”).

As per **Claim 37**, the rejection of **Claim 36** is incorporated; and Huntsman further discloses:

- wherein the graphical program is executable to produce a second output state after the graphical program produces the first output state (see Column 9: 61-67 to Column 10: 1-6, “The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.”);

- wherein the first computer is operable to provide a user interface update indicating the second output state (see Column 9: 61-67 to Column 10: 1-6, “The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and

KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.”); and

- wherein the second computer is operable to update the user interface displayed on the second computer in response to the user interface update (*see Column 10: 6-10, “Moments later, a user at the second computer 25 will typically select the “REFRESH” hypertext link which sends a reference of REMOTE.HTM of FIG. 10 to the first computer, repeating the behavior just described.”*).

As per **Claim 38**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to display the graphical diagram on the display of the second computer, using the information regarding the graphical diagram (*see Column 9: 42-50, “The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML “clickable” image.”*).

However, Huntsman does not disclose:

- wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program.

Kodosky discloses:

- wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program (*see Column 8: 8-23, “The virtual instrument 40*

also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42. ”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the first computer is operable to provide information regarding a block diagram associated with the graphical program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 39**, the rejection of **Claim 38** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to provide the user input specifying the edit to the first computer (*see Column 9: 50-57, “The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click.”*); and

- wherein the first computer is operable to edit the graphical program according to the user input specifying the edit (*see Column 9: 61-67 to Column 10: 1-6, “The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename*

as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.”).

However, Huntsman does not disclose:

- wherein in the second computer is operable to receive user input specifying an edit to the block diagram.

Kodosky discloses:

- wherein in the second computer is operable to receive user input specifying an edit to the block diagram (*see Column 18: 47-51, “FIG. 25 shows the EDIT menu selections ... CLEAR is useful for removing items from the active window, e.g., selected wires and structures from the block diagram window, or controls from the front panel window.”).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein in the second computer is operable to receive user input specifying an edit to the block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 40**, the rejection of **Claim 28** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program includes a block diagram portion and a user interface portion; and

- wherein the first computer is operable to execute the block diagram portion of the graphical program.

Kodosky discloses:

- wherein the graphical program includes a block diagram portion and a user interface portion (*see Figure 3: 40*); and

- wherein the first computer is operable to execute the block diagram portion of the graphical program (*see Column 17: 63-68, "With the front panel and block diagram complete, the instrument is ready to be used. The instrument is operated from the front panel. To execute the instrument, the user simply configures the input controls and "clicks" the GO button on the top of the screen ..."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program includes a block diagram portion and a user interface portion; and wherein the first computer is operable to execute the block diagram portion of the graphical program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 41**, the rejection of **Claim 40** is incorporated; however, Huntsman does not disclose:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion.

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Kodosky discloses:

- wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion (*see Column 8: 13-19, "The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the user interface of the graphical program comprises at least one input variable icon for providing inputs to the block diagram portion and at least one output variable icon for displaying outputs produced by the block diagram portion. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 42**, the rejection of **Claim 41** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to receive user input manipulating inputs of at least one input variable on the second computer (*see Column 9: 42-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*);

- wherein the first computer is operable to receive inputs of at least one input variable *(see Column 9: 50-57, "The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click.")*;

- wherein the second computer is operable to receive the output of at least one output variable *(see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.")*; and

- wherein the second computer is operable to display the output of at least one output variable *(see Column 10: 6-10, "Moments later, a user at the second computer 25 will typically select the "REFRESH" hypertext link which sends a reference of REMOTE.HTM of FIG. 10 to the first computer, repeating the behavior just described.")*.

However, Huntsman does not disclose:

- wherein the block diagram portion is operable to execute using the inputs of at least one input variable on the second computer; and

- wherein the block diagram portion is operable to generate an output of at least one output variable.

Kodosky discloses:

- wherein the block diagram portion is operable to execute using the inputs of at least one input variable on the second computer (*see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure."*); and

- wherein the block diagram portion is operable to generate an output of at least one output variable (*see Column 13: 47-55, "... execution instructions can be constructed by constructing a visual display in which at least one input variable produces at least output variable according to a displayed procedure."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the block diagram portion is operable to execute using the inputs of at least one input variable on the second computer; and wherein the block diagram portion is operable to generate an output of at least one output variable. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 43**, the rejection of **Claim 28** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program comprises a graphical data flow program.

Kodosky discloses:

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- wherein the graphical program comprises a graphical data flow program (*see Column 9: 33-36, "The structures represented in FIGS. 8-12 substantially facilitate the application of data flow programming techniques which are used in the preferred embodiments of the present invention."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a graphical data flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 44**, the rejection of **Claim 28** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program comprises a graphical control flow program.

Kodosky discloses:

- wherein the graphical program comprises a graphical control flow program (*see Column 9: 36-42, "FIG. 8 illustrates a sequence structure. FIG. 9 illustrates an iterative loop structure. FIG. 10 illustrates a conditional structure ..."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a graphical control flow program. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 45**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the graphical program comprises a graphical execution flow program (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*).

As per **Claim 46**, the rejection of **Claim 28** is incorporated; however, Huntsman does not disclose:

- wherein the graphical program implements a virtual instrument; and
- wherein the user interface of the graphical program comprises a front panel of the virtual instrument.

Kodosky discloses:

- wherein the graphical program implements a virtual instrument (*see Figure 3: 40*);

and

- wherein the user interface of the graphical program comprises a front panel of the virtual instrument (*see Figure 3: 42*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program implements a virtual instrument; and wherein the user interface of the graphical program comprises a front panel of the virtual instrument. The

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modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 47**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- a plurality of second computers each operable to couple to the network, wherein each of the plurality of second computers includes a display (*see Column 8: 11-15, "One or more second computers 25 running a standard, off-the-shelf hypertext browser program 27, can effectuate remote control using the standard, widely installed networking protocols, including those used in the internet [9]."*);

- wherein the first computer is operable to execute the graphical program and is operable to provide information describing a user interface of the graphical program over the network to each of the plurality of second computers during said executing (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*; *Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*); and

- wherein each of the plurality of second computers is operable to receive the information describing the user interface and display the user interface of the graphical program in response to said providing (*see Column 9: 42-50, "The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and*

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retrieve the GIF file containing the screen image in a separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image.").

As per **Claim 48**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the graphical program is executable to perform a measurement or automation function (*see Column 1: 29-34, "GUI environments tend to use a pointing device, like a mouse, in addition to a keyboard. Instead of typing a textual command, the user of a graphical interface typically selects a button or menu selection with a pointing device such as a mouse and "clicks" on his selection."*).

As per **Claim 49**, the rejection of **Claim 28** is incorporated; and Huntsman further discloses:

- wherein the second computer is operable to display information indicating a plurality of graphical programs on the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*); and

- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the plurality of graphical programs (*see Column 9: 47-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*).

As per **Claim 50**, the rejection of **Claim 49** is incorporated; and Huntsman further discloses:

- wherein, in displaying information indicating a plurality of graphical programs on the first computer, the second computer is operable to display a list of the plurality of graphical programs on the first computer (*see Column 8: 20-23, "The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19."*; *Column 9: 47-49, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer."*); and
- wherein, in specifying the graphical program on the first computer, the user input selects the graphical program from the list of the plurality of graphical programs (*see Column 9: 47-50, "The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image."*).

As per **Claim 51**, Huntsman discloses:

- establish a network connection with client software over a network (*see Column 9: 12-14, "The second computer 25 is connected to the first computer over the internet 31 ..."*);
- receive user input from the client software specifying a graphical program for execution (*see Column 9: 14-28, "A standard WWW "Web" browser 27 such as Netscape [8] is initiated on a second computer. To operate the remote control system 1, a user on the second computer 25 specifies the "starter URL" as specified by the coordinated naming convention 5.*

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URLs are defined by the WWW specification and include a named address of a target computer and a filename associated with the target computer.”);

- execute the graphical program (*see Column 8: 20-23, “The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19.”); and*

- send information describing a user interface of the graphical program over a network to the client software after establishing the network connection with the client software (*see Column 9: 31-41, “In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM.”);*

- wherein the user interface is operable to facilitate interaction between a user and the graphical program over a network (*see Column 9: 42-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”).*

However, Huntsman does not disclose:

- wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function.

Kodosky discloses:

- wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function (*see Column 8: 8-23, “The virtual instrument 40 also includes a block diagram 46 which graphically provides a visual*

representation of a procedure by which a specified value for an input variable displayed in the front panel 42 can produce a corresponding value for an output variable in the front panel 42.”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include wherein the graphical program comprises a plurality of interconnected function icons representing graphical data flow of a desired function. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 52**, the rejection of **Claim 51** is incorporated; and Huntsman further discloses:

- provide information indicating a plurality of graphical programs to the client software, wherein the information indicating a plurality of graphical programs is usable by the client software to display information indicating the plurality of graphical programs (*see Column 8: 20-23, “The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19.”; Column 9: 47-49, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer.”); and*
- wherein, in specifying the graphical program for execution, the user input selects the graphical program from the plurality of graphical programs (*see Column 9: 47-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”).*

As per **Claim 53**, the rejection of **Claim 52** is incorporated; and Huntsman further discloses:

- wherein the information indicating a plurality of graphical programs is usable by the client software to display a list of the plurality of graphical programs (*see Column 8: 20-23, “The executing GUI program 23 can be any MS-Windows program including the program manager, and is generally whatever program is in the foreground of the first computer 19.”; Column 9: 47-49, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer.”*); and
- wherein, in specifying the graphical program, the user input selects the graphical program from the list of the plurality of graphical programs (*see Column 9: 47-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”*).

As per **Claim 54**, the rejection of **Claim 51** is incorporated; and Huntsman further discloses:

- receive user input to the graphical program from the client software (*see Column 9: 42-50, “The user in this embodiment will see a screen virtually identical to the GUI screen on the first computer. The user may then click on a menu, button, or other Windows control image.”*); and
- provide the user input to the graphical program (*see Column 9: 50-57, “The WWW browser, in accordance with HTML/HTTP protocol [9,6,7], will determine the coordinates*

pointed to be the mouse. The coordinates will be sent to the URL associated with the region in the map file, which will contain the address of the first computer. In addition to the coordinates, the HTML mode variables defined by the coordinated naming convention 5 will also be transmitted as the result of a click.”);

- wherein the graphical program is operable to respond to the user input (*see Column 9: 61-67 to Column 10: 1-6, “The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7.”).*

As per **Claim 55**, the rejection of **Claim 51** is incorporated; and Huntsman further discloses:

- wherein the graphical program produces a first output state (*see Column 9: 31-41, “In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM.”); and*

- wherein said sending information describing a user interface of the graphical program comprises sending information indicative of the first output state (*see Column 9: 42-50, “The browser 27 on the second computer 25 will decode the HTML document file, and locate the references to the GIF file, request and retrieve the GIF file containing the screen image in a*

separate HTTP request, and display the GIF image on the screen of the second computer 25, as an HTML "clickable" image.").

As per **Claim 56**, the rejection of **Claim 55** is incorporated; and Huntsman further discloses:

- wherein the graphical program produces a second output state after the graphical program produces the first output state (*see Column 9: 61-67 to Column 10: 1-6, "The server control program 21 on the first computer 19 converts the HTML URL selection to GUI control commands using the hypertext-to-GUI-response means 7, and interpret the associated filename as a selection for the corresponding control according to the coordinated naming convention 5, and programmatically select the control or perform other action as request by the MODE and KEYTEXT variables using the programmatic-GUI-control-execution means 13 of the hypertext-to-GUI-response means 7."*); and

- wherein the memory medium further comprises program instructions executable to send a user interface update indicating the second output state to the client software (*see Column 10: 6-10, "Moments later, a user at the second computer 25 will typically select the "REFRESH" hypertext link which sends a reference of REMOTE.HTM of FIG. 10 to the first computer, repeating the behavior just described."*).

As per **Claim 57**, the rejection of **Claim 51** is incorporated; and Huntsman further discloses:

- send information associated with the graphical program to the client software (*see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM."*).

However, Huntsman does not disclose:

- information regarding a block diagram.

Kodosky discloses:

- information regarding a block diagram (*see Column 14: 55-58, "FIGS. 20a-l illustrate computer screen displays during each successive step in a construction of an exemplary block diagram using a block diagram editor such as that of FIGS. 2 or 4."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kodosky into the teaching of Huntsman to include information regarding a block diagram. The modification would be obvious because one of ordinary skill in the art would be motivated to remotely control a virtual instrument.

As per **Claim 58**, the rejection of **Claim 51** is incorporated; and Huntsman further discloses:

- establish a network connection with client software associated with a plurality of client computer systems (*see Column 8: 11-15, "One or more second computers 25 running a standard, off-the-shelf hypertext browser program 27, can effectuate remote control using the standard, widely installed networking protocols, including those used in the internet [9]."*); and

- send information describing a user interface of the graphical program over a network to the client software of each of the plurality of client computer systems after establishing the network connection with the client software of each of the plurality of client computer systems (see Column 9: 31-41, "In response to the starter URL, the server program 21 builds a new file, a GIF image file containing the screen image of the GUI on the first computer, and returns the data of REMOTE.HTM. ").

Response to Arguments

11. Applicant's arguments with respect to Claims 1, 28, and 51 have been considered, but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Art Unit: 2191

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/QC/

March 5, 2008

/Wei Zhen/

Supervisory Patent Examiner, Art Unit 2191